AMENDMENTS TO THE CLAIMS

1. (Currently amended) A control system for ~~controlling a steering device of a ship by~~ the heading of the ship ~~regulating a quantity to be controlled~~ based on a deviation of the ~~heading~~ ~~controlled quantity~~ from a target value thereof and control parameters, said control system comprising:

a behavior feature value detector for detecting one of the period and the frequency of behaviors of a specific kind performed by the ship ~~a subject to be controlled~~;

a variation calculator for calculating the amount of variations in said one of the period and the frequency; and

a control parameter updator for updating the value of at least one of the control parameters based on the amount of said variations.

2. (Currently amended) The control system according to claim 1, wherein the control parameter updator decreases the value of a proportional control coefficient which constitutes one of the control parameters according to ~~the~~ an amplitude of the ~~controlled quantity~~ heading when the amount of said variations is smaller than a specific threshold value.

3. (Original) The control system according to claim 1 or 2, wherein the control parameter updator increases the value of a proportional control coefficient which constitutes one of the control parameters according to the magnitude of the deviation when the amount of said variations is equal to or larger than a specific threshold value.

4. (Original) The control system according to claim 3, wherein the control parameter updator decreases the value of a differential control coefficient which constitutes one of the control parameters when the amount of said variations is equal to or larger than the specific threshold. value.

5. (Currently amended) The control system according to ~~one of claims~~ claim 1 ~~to~~ 4, wherein the variation calculator calculates the amount of said variations based on a standard deviation of one of the periods and the frequencies of a specific number of the latest behaviors.

6. (Currently amended) The control system according to ~~one of claims~~ claim 1 ~~to~~ 5, said control system further comprising:

a behavior detector for successively determining a time range of each of the behaviors of the specific kind performed by the ~~controlled subject~~ ship based on the control parameters;

wherein the behavior feature value detector detects said one of the period and the frequency of the behaviors of the specific kind based on the time range.

7. (Currently amended) The control system according to claim 6, wherein the behavior detector determines timings at which the ~~controlled quantity~~ heading takes extrema as being a start timing and an end timing of the time range of each of the behaviors.

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8. (Canceled)

9. (Currently amended) A control method for regulating the heading of a ship a quantity to be controlled based on a deviation of the controlled quantity heading from a target value thereof and control parameters, said control method comprising:

a behavior feature value detecting step of detecting one of the period and the frequency of behaviors of a specific kind performed by the ship a subject to be controlled;

a variation calculating step of calculating the amount of variations in said one of the period and the frequency; and

a control parameter updating step of updating the value of at least one of the control parameters based on the amount of said variations.

10. (Currently amended) A control state judgment used in a control system for controlling a steering device of a ship by regulating the heading of the ship regulating a quantity to be controlled based on a deviation of the a controlled quantity from a target value thereof and control parameters, said control state judgment device comprising:

a behavior feature value detector for detecting one of the period and the frequency of behaviors of a specific kind performed by the ship a subject to be controlled;

a variation calculator for calculating the amount of variations in said one of the period and the frequency; and

a control state judgment section for determining a control state of the controlled subject ship based on the amount of said variations.

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11. (Currently amended) A control state judgment method used in a control system for regulating a quantity to be controlled the heading of a ship based on a deviation of the a controlled quantity from a target value thereof and control parameters, said control state judgment method comprising:

a behavior feature value detecting step of detecting one of the period and the frequency of behaviors of a specific kind performed by a subject to be controlled the ship;

a variation calculating step of calculating the amount of variations in said one of the period and the frequency; and

a control state judgment step of determining a control state of the controlled subject ship based on the amount of said variations.